11: India G-4, 5 (1960-1961) 1962 AW11 Kerala AW11

the services, which have declined from Rs. 23.8 lakhs in 1956-57 to Rs. 17.4 lakhs in 1959-60.

8.24 The allotments during the Second Plan for the construction of roads and bridges were Rs. 2.146 crores and Rs. 1.932 crores respectively. The expenditure on roads and bridges in the first four years of the Plan amounted to Rs. 2.871 crores and Rs. 1.041 crores. The expenditure on maintenance in the three years 1956–59 was about Rs. 2.956 crores. The achievement in respect of road construction, improvement and upgrading and construction of major bridges lagged seriously behind targets in the fourth year of the Second Plan.

8.25 The Central Government's expenditure on the construction and improvement of national highways was as follows:

1958-59	Actual	Rs. 11 lakhs
1959-60	Revised Estimate	Rs. 32 lakhs
1960-61	Budget Estimate	Rs. 55 lakhs

8.26 The number of buses and trucks rose sharply in the State during the four years of the Second Plan; but particulars are lacking regarding the amount of public or private investment on vehicles. The nationalized passenger services planned to add 460 buses to the fleet, 300 for rehabilitation and new 160 for operating on a stretch of 400 miles of roads. If achieved, this would involve an investment of the order of Rs. 2 crores. Between 1956-57 and 1958-59 the capital at charge rose by Rs. 78.4 lakhs only.

THE INLAND WATERWAYS

8.27 The inland waterways of the State comprise: (*a*) the west coast canal system, stretching continuously except for a land-locked break between Azhikkal and Badagara (29.5 miles) a distance of over 347 miles from Trivandrum to Hosdurg; (*b*) cross canals, 387 miles long, mostly in the south of the State serving the commercial region in the midlands, and about 521 navigable miles in its various rivers. The Ashtamudi and Vembanad lakes provide extensive navigation facilities for traffic to and from Alleppey, Kottayam, Quilon and Cochin.

8.28 The waterways present a variety of problems though none of them are insuperable. These should be tackled systematically as the waterways promise superior economic advantages. Natural limitations arise from weather and rainfall; most rivers are navigable upto their middle reaches only during the period of the monsoons. In many places they are narrow and shallow (e.g., on the Trivandrum-Quilon route). Dredging is often insufficient and even the dredgers are unsuitable for dredging the narrow sections. Tugging services are required in hazardous areas, e.g., Pathiramanal-Munroe light area in the Vembanad lake. Bridges are often low, as in Varkala and on the Trivandrum-Quilon route, and they do not permit operation, particularly of passenger boats. Landing places have not been provided in many places, and where they are, they are not maintained in proper condition for use. A great drawback of water transport is insecurity and pilferage of the cargo. The

11: India G-4, 5 (1960-1961) 1962 AWll Kerala AWll

establishment of booking agencies and the introduction of insurance against loss or theft are crying needs of the water transport system of the State. Licensing rules have to be made uniform throughout the State; the levy of tolls at locks and toll stations in Malabar has to be abolished, the loss in revenue being made good by licence fees. The bulk transport of petroleum products, which is of the order of 72,000 tons annually, suffers from restrictions on licensing of tank-boats with wooden hulls. Since the traffic is likely to be doubled in 10 years the rules must be reviewed to see if they can be amended to suit local conditions, especially in the case of non-hazardous petroleum products. A considerable volume of traffic-potential is likely to be generated for the waterways by the proposed programme of industrialization. A proper organization answering to the anticipated demands for transportation by waterways is called for.

8.29 At present 25,030 country craft (registered tonnage 180,735), 466 motor-boats (registered tonnage 2,988) and 1,298 crafts are operating on Kerala's water-ways. In spite of the shortcomings referred to above, about 2.3 million tons of goods are moved annually over the waterways. The approximate figures of tonnage between specific points are 1.35 million tons between Cochin and Quilon, 60,000 tons on the Trivandrum-Quilon route and about 990,000 tons in the area north of Cochin. Particulars of the growth of traffic in recent years are not available.[1]

8.30 Motor-boats carry about 27,700 passengers a day on 65 different routes, the length of journeys ranging from 6 to 77 miles. Of this traffic, about 15,000 passengers were carried daily by 146 powered boats operated by the Kerala Water Transport Corporation in the Cochin-Quilon area. The Corporation's fares were slightly higher than on the Valloms. The organization ran into difficulties and is being reorganized. The State ferry services, operated with 13 powered boats between Ernakulam and Cochin, have been incurring losses. But in view of the revised fares introduced recently, they are expected to work profitably in the future.

8.31 The inland waterways were allocated Rs. 43 lakhs in the Second Plan in order to (*a*) construct the Alleppey-Shertallai Canal (*b*) improve the West Coast Canal from Trivandrum to Shoranur (*c*) construct the Badagara-Azhikkal Canal (*d*) improve canals in the Malabar area, and (*e*) carry out some minor works. In the first three years Rs. 23 lakhs were spent. As most of the funds were taken up in the execution of the Alleppey-Shertallai Canal Scheme, much was not done for the other schemes. Top priority is being given for improvements to the Cochin-Quilon section. The estimated cost for the Azhikkal-Badagara canal is Rs. 1.05 crores. As the proposed alignment involved deep cutting at several places, a new alignment is being worked out for execution in the Third Plan.

THE PORTS

8.32 The coastal and foreign traffic of the State is handled at Cochin, Alleppey, Calicut and 10 other ports of the State. The major port of Cochin dominates all

[1] However, in section 8.42 the rate of growth of traffic anticipated during 1961—71 is indicated.

11: India G-4,5 (1960-1961) 1962 AWll Kerala AWll

433 493 494 policy of gradual nationalization. In the nationalized sector, about 560 additional vehicles are proposed to be put on the road at a cost of Rs. 2.16 crores. Investment on land, buildings and equipment is to be Rs. 87.7 lakhs. A Road Transport Corporation should be formed to run the bus service. The private sector will have to meet the residual road passenger needs.

433 503 8.52 The recommendations of the Inland Water Transport Committee for the development of the waterways of the State must be impemented since considerable traffic potential can be tapped for this transport medium at low cost. In order not merely to keep pace with but also to be ahead of industrial developments promising traffic, it may be necessary to invest even more than Rs.2 crores in the Third Plan, as at present proposed. The improvements in navigability of the waterways north of Cochin of the Cochin-Quilon and Quilon-Trivandrum routes and the cutting of the landlocked Azhikkal-Badagara section, are some of the items in the Third Plan budget for development of inland waterways in the State. Extensions of the waterways south of Trivandrum, and north of Hosdrug upto Mangalore, to connect up with the Mangalore-Coondapur canal works, will have to be taken up later on in the Fourth Plan.

433 504 8.53 The State's current schemes for the development of Neendakara, Quilon and Calicut and the recommendations of the Intermediate Ports Committee have been taken into account in proposing an investment of Rs. 2.42 crores in the Third and Rs. 1.87 crores in the Fourth Plans. On account of anticipated demand for port-services by newly coming up or expanding industres in the State and outside, it would be wiser to provide initially higher investments in transport to keep ahead of the demand for traffic.

8.54 Port of Cochin can be expected to play an ever more dominant role in the transport of the State as the economy takes off. An irvestment of Rs. 1.75 crores proposed to be incurred to improve facilities at Cochin Port during the Third Plan will benefit not merely Kerala but Madras and other States. It will add conspicuously to the State's transport capacity, created by the investments in roads, waterways and railways within the State.

[PP. 139-205 not processed]